

Claims

[c1] WHAT IS CLAIMED IS:

1. A jointed two-piece visor arm structure of a sun visor assembly disposed in a passenger compartment, the visor arm transferring energy of impact of the sun visor assembly with a deploying side air curtain comprising: a first visor arm piece having a rod-like geometry and two ends with an elbow bend located along the length thereof in a desired location, a groove around the periphery of and near one end of said first visor arm piece for connecting the visor arm structure to a sun visor assembly mounting bracket, and a pivot joint fitting having pivot pin bore therein at the opposite end of said first visor arm piece;

a second arm piece having a substantially straight rod-like geometry and two ends having located at one end a pivot joint fitting having pivot pin bore engagingly complementary to the pivot joint fitting of said first visor arm piece;

a pivot pin joining said complimentary joint fittings together through said bores of said first and said second arm pieces providing a moveable connection around the pivot pin;

thereby allowing the visor arm structure to bend the sun visor assembly out of the way of the deploying side air curtain.

[c2] 2.The jointed two-piece visor arm structure as claimed in Claim 1 wherein, said structure comprises a material selected from the group consisting essentially of acrylonitrile butadiene styrene (ABS), nylon, glass filled nylon, polypropylene, acetal, preferably glass filled nylon, and most preferably 33% glass filled nylon.

[c3] 3.The jointed two-piece visor arm structure as claimed in Claim 1 wherein, said first and said second arm pieces are comprised of the same material.

[c4] 4.The jointed two-piece visor arm structure as claimed in Claim 1 wherein, said first and said second arm pieces are comprised of different materials

5. The jointed two-piece visor arm structure as claimed in Claim 1 wherein, said pivot pin comprises steel.

[c5] 6.The jointed two-piece visor arm structure as claimed in Claim 1 wherein, said mating faces of the complementary joint fittings have located thereon mating lugs and slots.

[c6] 7.The jointed two-piece visor arm structure as claimed in Claim 1 wherein, the mating faces of the complimen-

tary joint fittings have located thereon saw-tooth like surfaces.

- [c7] 8. A jointed two-piece visor arm structure of a sun visor assembly disposed in a passenger compartment, the visor arm transferring energy of impact of the sun visor assembly with a deploying side air curtain comprising:
- a first visor arm piece having a rod-like geometry and two ends with an elbow bend located along the length thereof in a desired location, a groove around the periphery of and near one end of said first visor arm piece for connecting the visor arm structure to a sun visor assembly mounting bracket, and a tongue for a tongue and groove-type joint having pivot pin bore therein at the opposite end of said first visor arm piece;
 - a second arm piece having a substantially straight rod-like geometry and two ends having located at one end a groove for a tongue and groove-type joint fitting having pivot pin bores engagingly complimentary to the tongue of said first visor arm piece;
 - a pivot pin joining said complimentary joint fittings together through said bores of said first and said second arm pieces providing a moveable connection around the pivot pin;
- thereby allowing the visor arm structure to bend the sun visor assembly out of the way of the deploying side air

curtain.

- [c8] 9.The jointed two-piece visor arm structure as claimed in Claim 8 wherein, said structure comprises a material selected from the group consisting essentially of acrylonitrile butadiene styrene (ABS), nylon, glass filled nylon, polypropylene, acetal, preferably glass filled nylon, and most preferably 33% glass filled nylon.
- [c9] 10.The jointed two-piece visor arm structure as claimed in Claim 8 wherein, said first and said second arm pieces are comprised of the same material.
- [c10] 11.The jointed two-piece visor arm structure as claimed in Claim 8 wherein, said first and said second arm pieces are comprised of different materials
12. The jointed two-piece visor arm structure as claimed in Claim 8 wherein, said pivot pin comprises steel.
- [c11] 13.The jointed two-piece visor arm structure as claimed in Claim 8 wherein, said mating faces of the complementary joint fittings have located thereon mating lugs and slots.
- [c12] 14.The jointed two-piece visor arm structure as claimed in Claim 8 wherein, the mating faces of the complementary joint fittings have located thereon saw-tooth like surfaces.

[c13] 15. A jointed two-piece visor arm structure of a sun visor assembly disposed in a passenger compartment, the visor arm transferring energy of impact of the sun visor assembly with a deploying side air curtain comprising: a first visor arm piece having a rod-like geometry and two ends with an elbow bend located along the length thereof in a desired location, a groove around the periphery of and near one end of said first visor arm piece for connecting the visor arm structure to a sun visor assembly mounting bracket, a pivot joint fitting having pivot pin bore therein at the opposite end of said first visor arm piece, and an electrical conducting assembly comprising;

a pair of electrically conductive members positioned in spaced relationship by a plurality of spacing members, and

a plurality rotational engagement detents;

a second arm piece having a substantially straight rod-like geometry and two ends having located at one end a pivot joint fitting having pivot pin bore engagingly complementary to the pivot joint fitting of said first visor arm piece, and an electrical conducting assembly comprising;

a pair of electrically conductive members positioned in spaced relationship by a plurality of spacing members, and

a plurality rotational engagement detents;
a pivot pin joining said complimentary joint fittings together through said bores of said first and said second arm pieces providing a moveable connection around the pivot pin;
thereby allowing the visor arm structure to provide power for a vanity mirror for example, and to bend the sun visor assembly out of the way of the deploying side air curtain.

[c14] 16.The jointed two-piece visor arm structure as claimed in Claim 15 wherein, said structure comprises a material selected from the group consisting essentially of acrylonitrile butadiene styrene (ABS), nylon, glass filled nylon, polypropylene, acetal, preferably glass filled nylon, and most preferably 33% glass filled nylon.

[c15] 17.The jointed two-piece visor arm structure as claimed in Claim 15 wherein, said first and said second arm pieces are comprised of the same material.

[c16] 18.The jointed two-piece visor arm structure as claimed in Claim 15 wherein, said pivot pin comprises steel.

[c17] 19.The jointed two-piece visor arm structure as claimed in Claim 15 wherein, said mating faces of the complimentary joint fittings have located thereon mating lugs

and slots.

[c18] 20. The jointed two piece visor arm structure as claimed in Claim 15 wherein, the mating faces of the complimentary joint fittings have located thereon saw-tooth like surfaces.